

**STATE OF UTAH**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF OIL, GAS AND MINING**  
1594 West North Temple Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
Telephone: (801) 538-5291 Fax: (801) 359-3940

**NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS**

The informational requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program. (R647-4-et seq.)

*These pages will replace the corresponding pages in the original NOI.*

\*\*\*\*\*

**1. GENERAL INFORMATION**

1. Name of Mine: Velvet Mine (BLM Project No. UTU-68060)
2. Legal name of entity (or individual) for whom the permit is being requested:  
Mailing Address: Uranium One Americas, Inc.  
City, State, Zip: 907 No. Poplar Street, Suite 260, Casper, WY 82601  
Phone: (307) 234-8235 Fax: (307) 237-8235  
E-mail Address: norman.schwab@uranium1.com

**Type of Business:**

Corporation ☒ LLC ☐ Partnership – general ☐ or limited ☐  
Sole Proprietorship (dba) ☐ or Individual ☐

**Entity must be registered (and maintain registration) with the State of Utah, Division of Corporations (DOC).**

Are you currently registered to do business in the State of Utah? Yes ☒ No ☐

Entity # 7490196-0143

If no, contact DOC at [www.commerce.utah.gov](http://www.commerce.utah.gov) to renew or apply.

Local Business License # : \_\_\_\_\_ (if required)

Issued by: City: \_\_\_\_\_ or County: \_\_\_\_\_

**If Business is a Sole Proprietor:**

Name of owner: \_\_\_\_\_ Title: \_\_\_\_\_

Business Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

**APPROVED**

**MAY 26 2011**

**If Business is a Partnership:**

Name of Partner: \_\_\_\_\_

Business Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

**DIV. OIL GAS & MINING**

**If Business is a Corporation:**

Name of Officers: Donna Wichers, President Title: Fletcher Newton, Vice President  
Graham du Preez, CFO & Treasurer Title: Lloyd Hong, Assistant Secretary  
John Sibley, Secretary Title: \_\_\_\_\_  
Title: \_\_\_\_\_  
Corporate Address: 907 No. Poplar Street, Suite 260  
City, State, Zip: Casper, WY 82601  
Phone: (307) 234-8235 Fax: (307) 237-8235  
E-mail Address: norman.schwab@uranium1.com

**If Business is a Limited Liability Company: Member Managed \_\_\_\_\_ Manager Managed \_\_\_\_\_**

Name of 1<sup>st</sup> Member/Manager: \_\_\_\_\_ Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

2nd Member/Manager: \_\_\_\_\_ Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**2. Contacts:**

This person may be notified for: permitting ☒ surety ☒ Notices ☒  
(please check all that apply)

Name: Norman Schwab Title: \_\_\_\_\_  
Address: 8055 East Tufts Avenue, Suite 500  
City, State, Zip: Denver, CO 80237  
Phone: (303) 325-2379 Fax: (303) 325-2371  
Emergency, Weekend, or Holiday Phone: (303) 517-3422  
E-mail Address: norman.schwab@uranium1.com

This person may be notified for: permitting \_\_\_\_\_ surety \_\_\_\_\_ Notices \_\_\_\_\_  
(please check all that apply)

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Emergency, Weekend, or Holiday Phone: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**APPROVED**

**MAY 25 2011**

**DIV. OIL GAS & MINING**

**Registered Utah Agent (as identified with the Utah Dept of Commerce) (if individual leave blank):**

Name: CT Corporate System Title: \_\_\_\_\_  
Address: 136 East South Temple, Suite 2100  
City, State, Zip: Salt Lake City, UT 84111  
Phone: (801) 364-5101 Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

3. Certification:

**This certification must be signed by:**

- (1.) an executive officer if the applicant is a corporation;
- (2.) a partner if applicant is a partnership (general or limited);
- (3.) the owner if applicant is a sole proprietorship;
- (4.) the member or manager if applicant is a limited liability company; or
- (5) the individual if the applicant if filing as an individual:

I state under penalty of perjury under the laws of the state of Utah and the United States of America that:

- a. Uranium One Exploration U.S.A. Inc. (transferor), has provided a copy of the approved mining and reclamation plan. I will follow the approved mining and reclamation plan until such time that I provide the Division with an amended Notice of Intention (plan) and receive approval of the amended Notice; AND
- b. I commit to the reclamation of the aforementioned large mining operation as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.

Signature:  Date: 05-13-2011

Name (typed or printed): Donna Wichers

Title/Position (if applicable): President

**APPROVED**  
**MAY 26 2011**  
**DIV. OIL GAS & MINING**

Scott M. Matheson  
Governor



STATE OF UTAH  
DEPARTMENT OF HEALTH  
DIVISION OF ENVIRONMENTAL HEALTH  
Utah Water Pollution Control Committee

150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110-2500

File  
Atlas Minerals  
Velvet Mine  
Copy to Tamt.  
Ewayne

October 19, 1983  
533-6146

JIM

Calvin K. Sudweeks  
Executive Secretary  
Rm 410 (801) 533-6146

OCT 25 1983

James O. Mason, M.D., Dr.P.H.  
Executive Director  
Department of Health  
801-533-6111

Kenneth L. Alkema  
Director  
Division of Environmental Health  
801-533-6121

MEMBERS

Grant K. Borg, Chairman  
W. Lynn Cottrell  
Harold B. Lamb  
Kenneth L. Alkema  
Franklin N. Davis  
Dale P. Bateman  
Joseph A. Urbanik  
C. Arthur Zeldin  
Mrs. Lloyd G. Bliss

Ricky J. Broschat  
Environmental Specialist  
Atlas Minerals  
P.O. Box 1207  
Moab, Utah 84532

ACT 1037/040

RECEIVED

OCT 21 1983

DIVISION OF  
OIL, GAS & MINING

RE: Velvet Mine/Ion Exchange

Dear Mr. Broschat:

The plans and information relating to the Atlas Minerals Velvet Mine uranium ion exchange unit have been reviewed. Plans 090-001 through 003 and the information submitted September 9 and September 30, 1983 were reviewed.

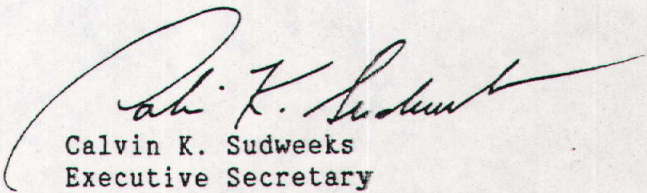
As a result of our review the addition of the uranium ion exchange unit is approved and a construction permit as constituted by this letter is hereby issued.

As stated in the information the fifty cubic foot tank system is designed to treat 15 gpm of 6 mg/l uranium wastewater to a concentration of approximately 0.6 mg/l. Regeneration will be monthly with the elution taken to the Atlas Moab Mill.

Enclosed is a billing for the Engineering Plan Review. Please remit your check for the minimum filing fee of \$50.00 to the Department of Health, Bureau of Water Pollution Control.

Sincerely,

UTAH WATER POLLUTION CONTROL COMMITTEE

  
Calvin K. Sudweeks  
Executive Secretary

SRM:na  
Enclosure  
cc: Southeastern District Health Dept.  
Division of Oil, Gas and Mining  
0219

ATLAS MINERALS  
PROCEDURES FOR  
SEALING  
BOREHOLES,  
SHAFTS, AND  
PORTALS

Prepared for the DOGM  
By: Patrick R. Lorello  
Envrionmental Technician  
Atlas Minerals

## TABLE OF CONTENTS

### SEALING PROCEDURES:

- I. Boreholes
- II. Portals
- III. Shafts

### Page No.

1

4

5

### DIAGRAMS:

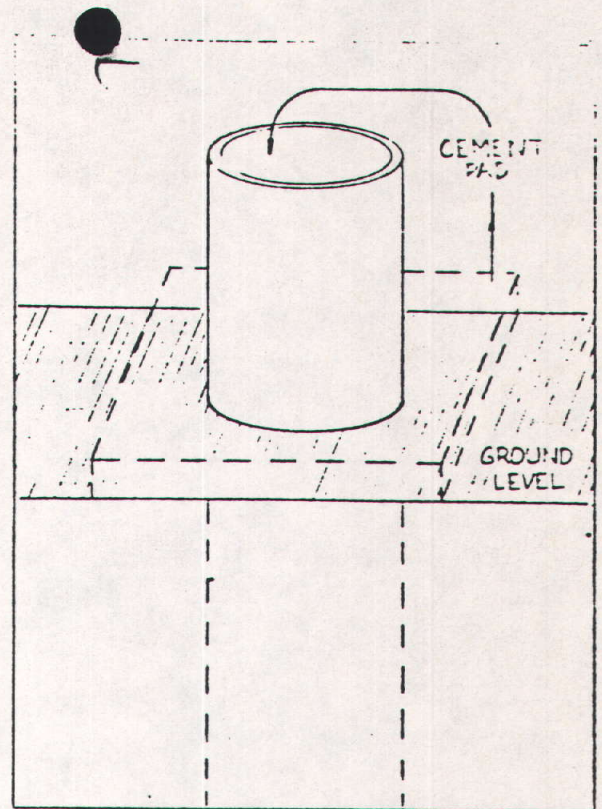
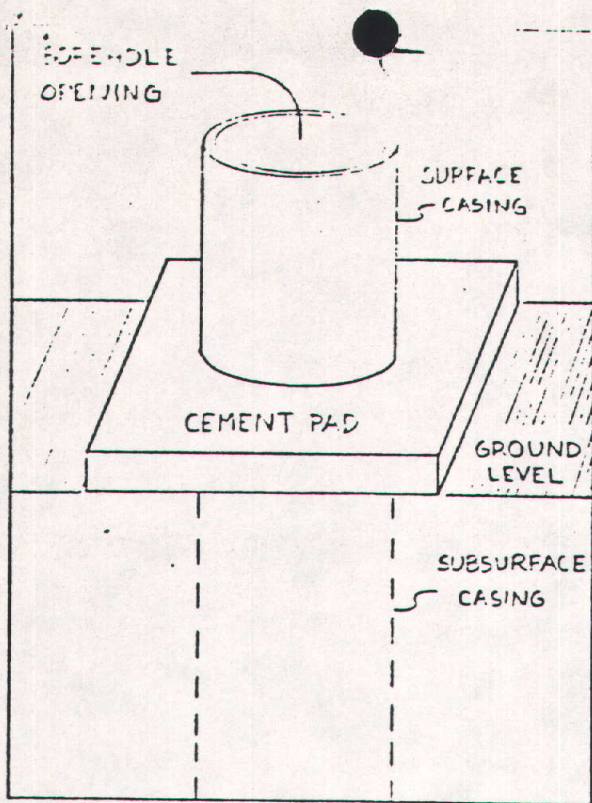
- I. Boreholes

2, 3

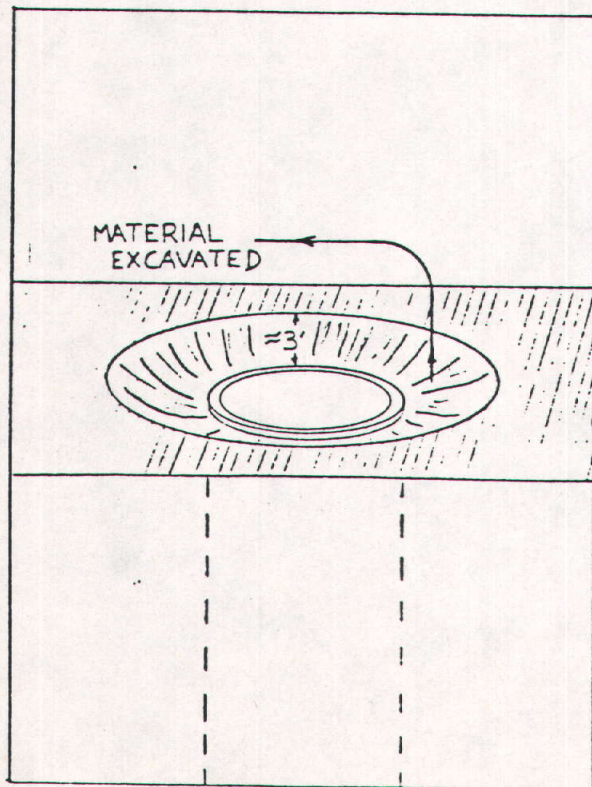
## I. PROCEDURE FOR BOREHOLE SEALING

Boreholes used by Atlas Minerals for the ventilation of underground workings vary in diameter from 8 inches to 60 inches. Boreholes are either steel cased the entire length of the borehole or the casing extends approximately 20 to 30 feet beneath the surface. Whether a borehole is cased entirely or only cased near the surface depends on the nature of the subsurface material. If the subsurface material is determined to be stable (i.e. sloughing of hole will not occur, and no water bearing strata was encountered) then casing will only be placed near the surface, if the subsurface material is unstable the borehole will be cased its entire length. Any water bearing strata encountered is expected to be sealed by the borehole casing, no water bearing strata are encountered in boreholes which have been determined to be stable. The following description and diagrams list the recommended procedures to be followed for borehole sealing.

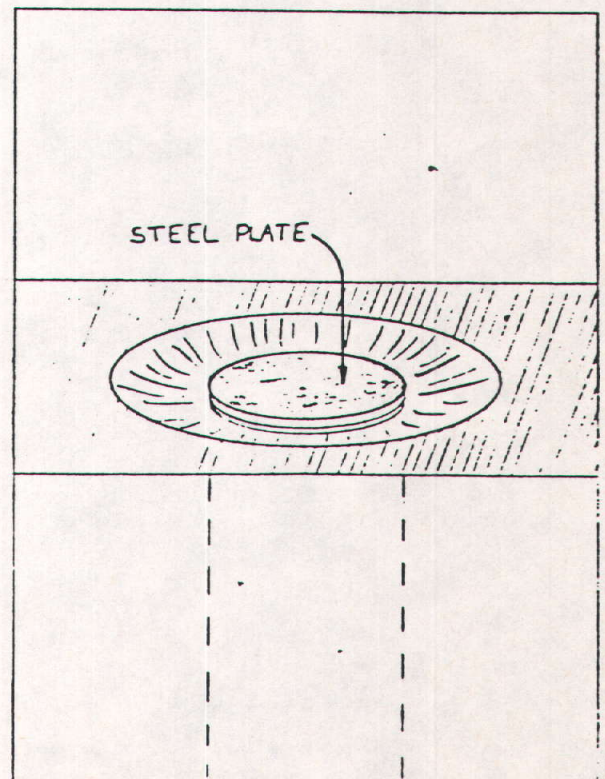
- A. Where applicable the cement pad surrounding the borehole shall be broken up and placed into the borehole, as illustrated in diagram A.
- B. If the surface surrounding the borehole is loose, the loose surface material shall be excavated to allow room for the casing to be cut approximately three feet beneath the ground surface (see diagram B). If the surface surrounding the borehole is solid rock, the casing shall be cut level with the exposed rock.
- C. A steel plate shall be placed on top of the borehole and welded to the casing (see diagram C). The plate shall be of sufficient size and strength to protect the integrity of the surface contours.
- D. Where applicable, material previously excavated will be placed back on top of the sealed borehole and regraded to natural contours, as shown in diagram D.



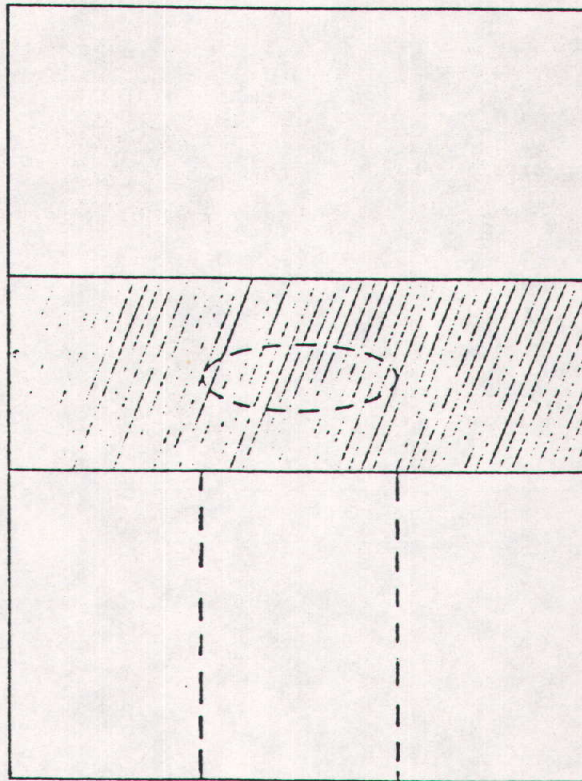
A. CEMENT PAD BROKEN UP AND REMOVED.



B. LOOSE MATERIAL REMOVED AND CASING CUT.



C. STEEL PLATE WELDED IN PLACE.



D. SURFACE REGRADED TO  
NATURAL CONTOURS.

## II. PROCEDURE FOR PORTAL SEALING

Atlas Minerals uses portals as surface entrances to addits or declines to access underground workings. The average portal dimension is 9 feet X 12 feet. Sealing procedures for portals are discussed for two portal categories.

The first portal category involves portals that have their entrance locations adjacent to level ground. Sealing procedures shall utilize the surrounding waste rock to backfill the entrance, pushing as much waste rock into the opening as possible. The waste rock shall then be sloped to prevent surface drainage from entering the sealed portal.

The second portal category involves portals that have their entrance locations above level ground (e.g. portal entrances in cliffs), or portal entrance locations where it would not be feasible to backfill. Sealing procedures shall utilize explosive charges placed around the portal perimeter to seal the portal entrance.

### III. PROCEDURE FOR SHAFT SEALING

Mine shafts used by Altas Minerals as vertical access to underground workings, will be sealed according to the following description.

- A. Associated superstructure will be removed from the shaft opening, primarily the headframe, hoisting works, backleg structures, and the concrete pad.
- B. The shaft will be backfilled using the surrounding waste rock until the waste rock reaches the ground surface.
- C. Once the waste rock reaches ground level the surface will be graded to match existing surface contours, and prevent surface drainage from entering the sealed shaft.

ACT/037/051

MINED LANDS SURETY CONTRACT

THIS CONTRACT, made and entered into as of the 27th day of January, 1983, between Atlas Corporation, a Delaware corporation (hereinafter called the "Operator"), and the Board of Oil, Gas, and Mining, duly authorized and existing by virtue of the laws of the State of Utah (hereinafter called the "Board").

W I T N E S S E T H:

WHEREAS, the Operator is the owner or lessee and is in possession of certain mines and associated workings in the State of Utah (hereinafter called the "Mines"), which are more particularly described on Exhibit "A", attached hereto and by this reference made a part hereof; and

WHEREAS, the operator has filed Notices of Intention to Commence Mining Operations and Mining and Reclamation Plans for the Mines; and

WHEREAS, certain of the aforesaid Notices and Plans have been approved by the Board as shown on Exhibit "B" attached hereto and by this reference made a part hereof; and

WHEREAS, the Operator is able and willing to conduct reclamation operations at the Mines in accordance with the

requirements specified in the aforesaid Notices and Plans, the Mined Land Reclamation Act, and the rules and regulations adopted in connection therewith; and

WHEREAS, the Board has considered the factual information and recommendations provided by the staff of the Division of Oil, Gas, and Mining as to the magnitude, type and costs of the approved reclamation activities planned for the Mines; and

WHEREAS, the Board is cognizant of the nature, extent, duration of the operations at the mines, the Operator's financial status, and the Operator's ability to carry out the planned work.

NOW, THEREFORE, in consideration of the promises and covenants herein contained the Operator and the Board hereby agree as follows:

1. The Operator agrees to reclaim the land affected by mining activities at the Mines in accordance with the Operator's approved Mining and Reclamation Plans and any future amendments or additions thereto, the Mined Land Reclamation Act, and the Regulations adopted under said Act.

2. The Operator and the Board agree that, except as specifically provided herein, reclamation of the land affected by mining activities at the Mines shall be governed only by the Operator's approved Mining and Reclamation Plans and any future

amendments or additions thereto as approved by the Board or Division, along with applicable laws and regulations.

3. The Operator shall be an independent contractor and as such shall have no authorization to bind the State of Utah or the Board to any agreement except as herein set forth.

4. The Operator agrees to hold harmless the State of Utah, the Board, and the Division of Oil, Gas, and Mining from claims for personal injury or death, damages to personal property and liens of workmen and materialmen, howsoever caused, in performance of this contract.

5. In lieu of accepting a bond or cash surety, the Board agrees to accept the Operator's personal guarantee as set forth in this contract, to reclaim the land affected by the Mines in accordance with the Operator's Mining and Reclamation Plans listed in Exhibit "B" and any future amendments or additions thereto, as approved by the Board.

6. The reclamation obligation for which this contract is a personal guaranty shall be released by the Board as to each of the Mines upon the completion of reclamation as specified in the state statute, regulations, and approved Mining and Reclamation Plan applicable to such mine. Any determination by the Division that the Operator has not complied with an applicable statute, regulation or approved

Mining and Reclamation Plan requirement may be reviewed by the Board upon request of the Operator after notice and hearing.

7. This Contract shall fulfill the Operator's obligations under Section 40-8-14, Utah Code Annotated, and Rule M-5 of the Board's Regulations.

8. If the Operator does not comply with its obligations under this Contract as to any of the Mines, the Board shall give to the Operator a notice of noncompliance and shall initiate proceedings to revoke the approval of the Notice of Intention to Commence Mining Operations relating to the mine which is not in compliance with this Contract. Such proceedings shall be governed by applicable law.

9. If the Mined Land Reclamation Act, the regulations adopted thereunder, or any other statute or regulation, are amended to remove the legal requirement serving as the basis for any provision of this Contract, the Operator will no longer be required to comply with such provision of the Contract. Nothing herein, however, shall be deemed to relieve the Operator from compliance with applicable laws and regulations relating to reclamation of land affected by the operations of any of the mines notwithstanding any provisions of this Contract.

10. This contract shall apply to those mines listed on Exhibit "B" and will apply each of the other Mines as the

applicable Mining and Reclamation Plan for that mine is approved by the Board.

11. This Contract shall supersede all individual surety contracts currently in force between Atlas and the Board, unless Atlas requests and the Division or Board, as appropriate, approves the continuation in force of any such contract.

IN WITNESS WHEREOF, the parties hereto have respectively set their hands and seals this \_\_\_\_ day of \_\_\_\_\_, 19\_\_.

ATTEST:

ATLAS CORPORATION

Cheryl J. Yura  
Assistant Secretary

SEAL

Edward R. Farley  
President

BOARD OF OIL, GAS, AND MINING

L. B. Henderson

John C. Harr

Robert L. L. Harris

Richard B. [Signature]

L. Steele McIntyre

Dianne P. Nelson

[Signature]

STATE OF UTAH           )  
                                  : ss.  
COUNTY OF            )

On the \_\_\_\_ day of \_\_\_\_\_, 19\_\_, personally  
appeared before me Edward R. Farley, Jr. who,  
being by me duly sworn, did say that he is the President  
of Atlas Corporation, a corporation, and  
that the foregoing instrument was signed on behalf of said cor-  
poration by authority of its Bylaws or a resolution of its Board  
of Directors, and said Edward R. Farley, Jr. acknowl-  
edged to me that said corporation executed the same.

[Signature]  
NOTARY PUBLIC  
Residing at: Paradise, Nev. N.J.

My Commission Expires:

May 21, 1985

\_\_\_\_\_, acting as Secretary of the Board of Oil, Gas, and Mining of the State of Utah, hereby certifies that the foregoing Surety Agreement was approved by the Board on the 27th day of January, 1983, in Cause Nos. ACT/019/007, ACT/019/009, ACT/015/011, ACT/015/013, ACT/015/014, ACT/037/003, ACT/037/005, ACT/037/006, ACT/037/007, ACT/037/008, ACT/037/010, ACT/037/011, ACT/037/012, ACT/037/013, ACT/037/017, ACT/037/019, ACT/037/021, ACT/037/023, ACT/037/024, ACT/037/034, ACT/037/040.

\_\_\_\_\_

EXHIBIT A

1. Mines operated by Atlas:

Calliham/Sage

Dunn

Far West

Four Corners

Pandora

Patti Ann

Probe

Rim Columbus

Snow

Standard I

Velvet

Wood Lease

2. Mines owned or leased by Atlas but operated by someone other than Atlas:

Cactus Rat

Cane Creek

Happy Jack

Ivy

Locust Spider

Louise

Radium King

Standard II

Windfall

EXHIBIT B

Mines subject to approved notices of intent:

Dunn	11/7/77
Ivy	2/3/79
Locust Spider	4/20/77
Louise	9/28/78
Pandora	4/20/77
Patti Ann	9/24/76
Probe	4/13/77
Radium King	3/22/77
Rim Columbus	3/22/77
Standard II	10/27/78
Velvet	11/29/79
Windfall	4/20/77

**Atlas Minerals**  
Division of Atlas Corporation  
**Big Indian Mines**  
Moab, Utah  
84532

File ACT/037/040

Sim

RECEIVED

JAN 10 1981

DIVISION OF  
OIL, GAS & MINING

15 January, 1981

James W. Smith, Jr.  
Division of Oil, Gas, and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

RE: Velvet Mine  
ACT/037/040  
Water Treatment Facility

Dear Mr. Smith:

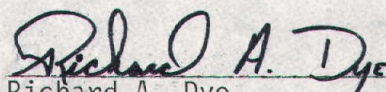
As per your request, enclosed is the engineering report that was submitted to the Utah Division of Environmental Health. Based upon the information contained in this report that division has issued Atlas a construction permit as required under the Wastewater Disposal Regulations Part 1.2.2.

As we discussed over the phone there is still some question concerning our responsibility under RCRA on this facility. Until Atlas can determine its obligations under this law I am unable to adequately address abandonment reclamation. As always our goal will be to cause no unnecessary disturbance and to return the site to its original condition as nearly as practicable. When Atlas determines what RCRA requires I will address this point more fully.

Short term and operating term disturbance will be confined to the 3 acres which will contain the ponds. Access to the site will take place on existing roadways and the inlet pipeline will be layed on the ground surface.

I hope that the enclosed information is adequate to expedite your approval of this amendment as we would like to begin construction as soon as possible. If I can provide additional information please contact me. Thank you.

Sincerely;

  
Richard A. Dye  
Reclamation Engineer

RD/tw  
Encl.

RECEIVED

JAN 19 1981

DIVISION OF  
OIL, GAS & MINING

Engineering Report  
For The  
Proposed  
Construction and Treatment Techniques  
Velvet Mine Water Treatment Facility  
San Juan County, Utah

Prepared by Atlas Minerals Engineering Department

Richard A. Dye

January 12, 1981

## 1.0 - INTRODUCTION

The following report details the location, construction methods and treatment techniques as proposed for the Velvet Mine water treatment system.

The proposed mine water treatment system consists of two ponds. The first pond is designed to store and allow solids settlement of water removed from a pre-polluted aquifer located at the mine ore level. The second pond is designed to store and effect the settling of radium after being treated with barium chloride solution. The treated water will then leave the second pond and be discharged into a normally dry, unnamed arroyo which based upon our experience is not a tributary to any stream or river system.

2.0 - CONSTRUCTION

## 2.1 - SITE LOCATION

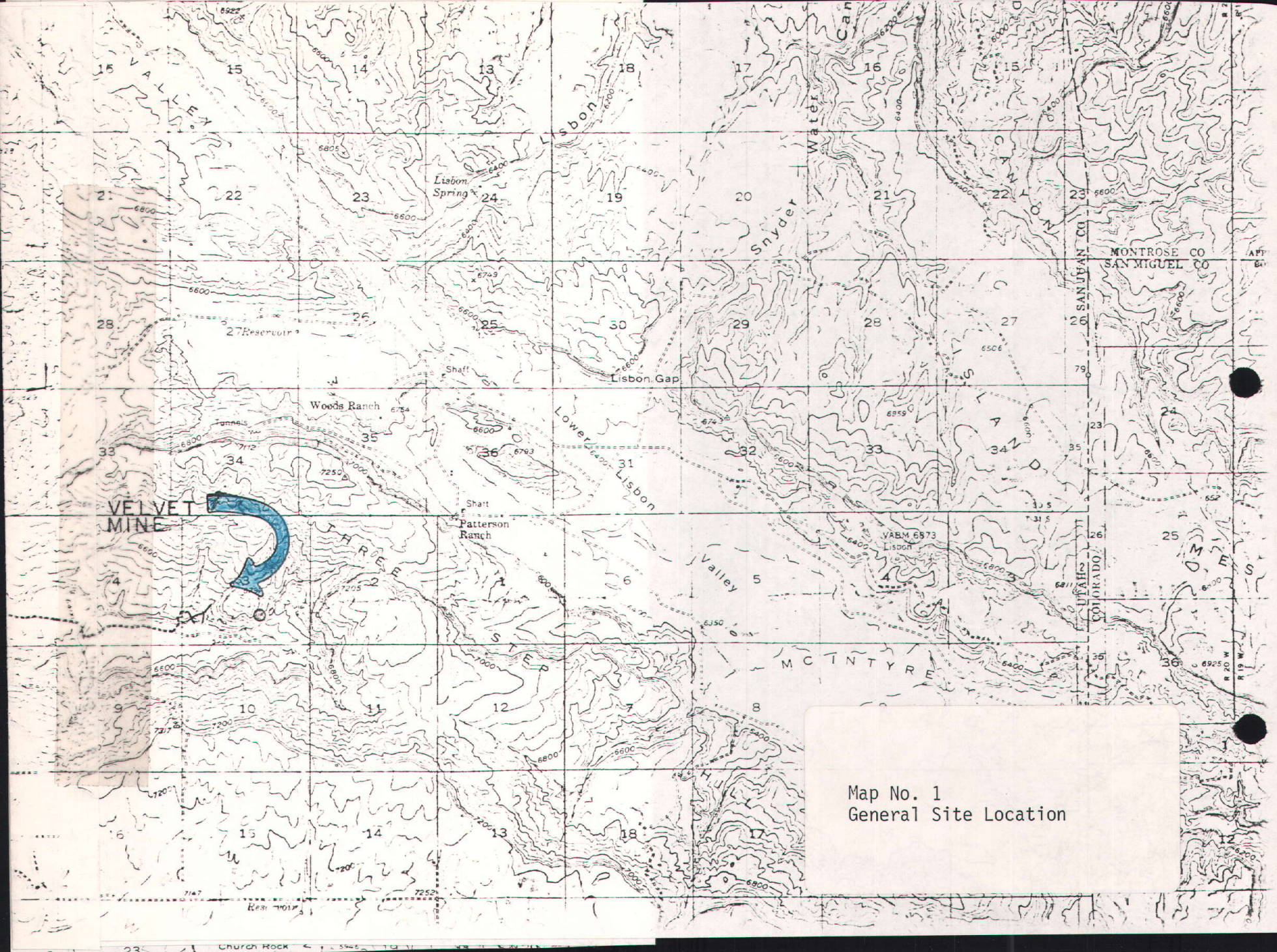
The Velvet Mine consists of a uranium - vanadium ore body located in the Chinle Formation. The proposed pond site is in San Juan County, Utah on land administered by the Bureau of Land Management in the NW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 3 Township 31S., Range 25 E., SLBM (Map No. 1 and 2). The mine is currently operating under an approved mining plan as issued by the Utah Division of Oil, Gas, and Mining.

## 2.2 - PROPOSED CONSTRUCTION

The proposed treatment pond facility consists of two ponds: a main pond for flocculation and storage, and a barium chloride treatment pond (Map No. VE-T-156-d). The ponds will be constructed in a naturally sloping bowl-shaped area. Constructed embankments will have internal and external slopes of three horizontal to one vertical unit. The maximum constructed embankments will be approximately nine feet in height, with a minimum of three feet of freeboard. The minimum width at the top of each dike will be eight feet. Dike protection at the pond outfalls will consist of rock rip-rap to control erosion.

The planning for the water treatment facility is based on an average expected flow of 25 gpm or 36,000 gallons per day. The main storage pond will store 484,592 gallons or 13 days retention. The barium chloride pond will hold 320,120 gallons or 9 days retention.

Water will be transferred from the mine water discharge to the ponds through a 4 inch, 1850 foot long surface pipeline.



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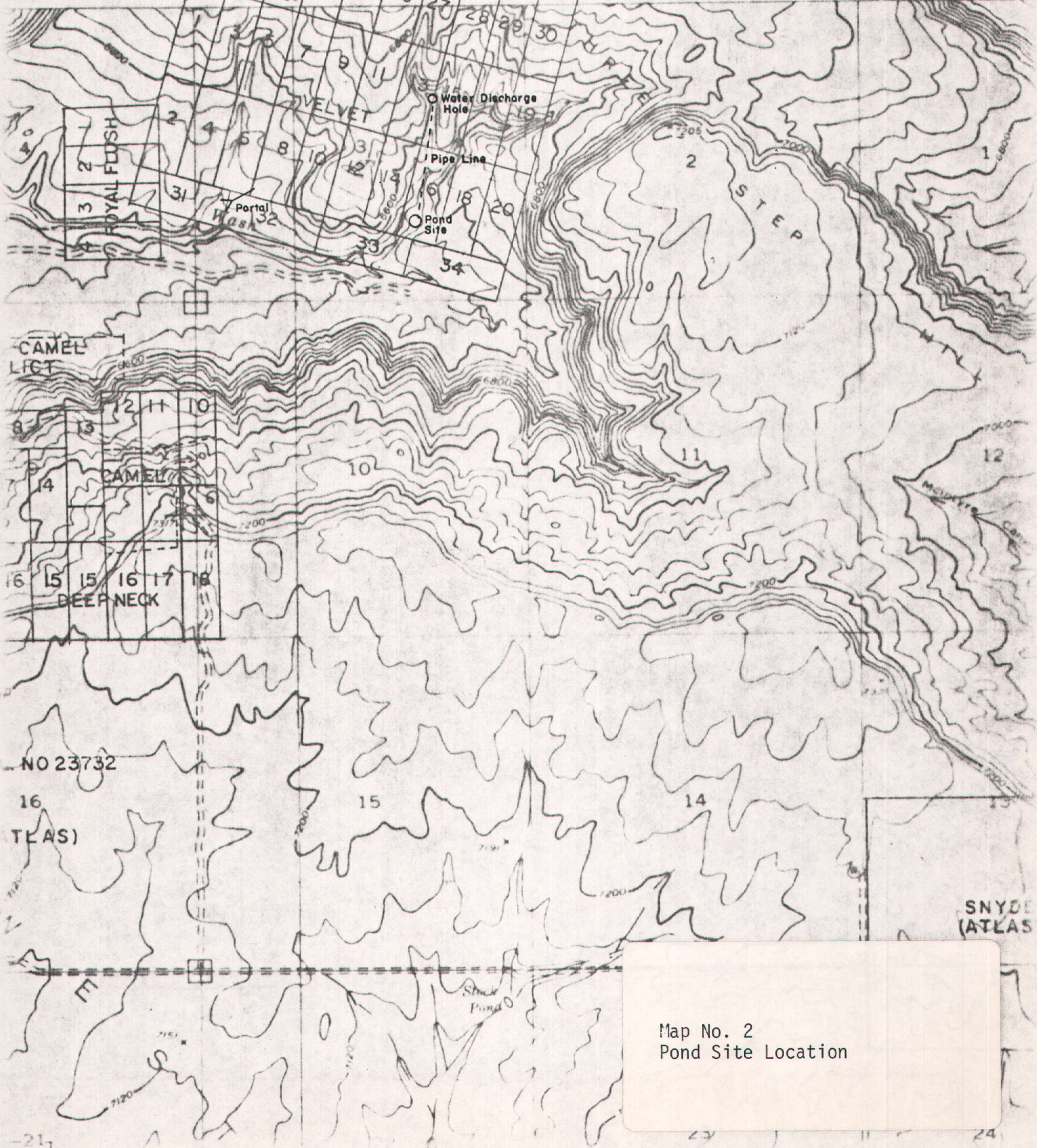
MT. PEALE 4 SW QUADRANGLE  
UTAH—SAN JUAN CO.

R 25 E

10°

Preliminary edition  
Pending completion of 1:62,500 scale  
15 minute maps covering this area

DIVISION OF  
OIL, GAS & MINING



3.0 - TREATMENT

### 2.3 - SITE CONDITIONS

The characteristic soil type, as indicated by auger corings and visual inspection, consists of a uniformly distributed well-graded, mixed grain sand.

Testing for permeability was done on two typical area soils; the well-graded, mixed grain sand, and a white silty clay. In addition, the soils were tested for permeability when mixed with an enzyme designed for seepage control. The results of the tests are as follows (Appendix 2):

Percolation tests		
	K. Feet/Day	Maximum Density (percent)
Well graded, Mixed Grain Sand	0.0227	95
With Enzyme	0.0066	95
White Silty Clay	0.009	95
With Enzyme	0.0003	95

Based upon information gained from testing, the following construction techniques will be used:

- 1) The dike cores and pond bottom will be constructed from the well graded, mixed grain sand.
- 2) Throughout construction all areas of the pond will be moistened to 95 % of maximum density while being compacted.
- 3) An eight inch clay liner will be placed over the pond core.
- 4) While wetting and compaction of both layers is taking place, enzymes will be added according to the manufacturers directions for enhanced water retention.

### 3.1 - INTRODUCTION

The treatment method utilized will be employed in a two step system. Step One will be the addition of a polyelectrolyte coagulant to the incoming water. This will aid the settling of suspended solids and improve the barium chloride-radium reaction, as well as enhance the removal of radium involved in the suspended fraction.

Step Two will take this clarified water from the main settling pond through the barium chloride treatment facility (Map No. VE-T-154-e). The barium chloride will combine with the dissolved radium, allowing this fraction to settle out in the second pond.

### 3.2 - COAGULANT TREATMENT

In order to enhance the settlement of suspended solids and radium and improve the barium chloride-radium reaction a polyelectrolyte coagulant will be added to the incoming water. The mixing device used for this is shown in DWG. No. VE-T-155-g.

Incoming water will activate an electronic relay causing a solution of the polyelectrolyte to be added above the water outfall. This method of addition will result in a rapid mixing for uniform distribution of the coagulant. The water will then flow through the baffled section of the mixer for initial flocculant building before it is discharged out of the side of the mixer. This water will then enter the first pond for additional settling.

Based upon cylinder testing with representative water samples the rate of coagulant addition will be 6 ml per liter of incoming water.

### 3.3 - BARIUM CHLORIDE TREATMENT

The clarified water from the main settling pond will be decanted into the barium chloride treatment facility at a predetermined rate. In the treatment facility, a barium chloride is added to the mine water in order to precipitate a barium-radium sulfate  $(\text{Ba,Ra})\text{SO}_4$ . This allows the radium in the dissolved fraction to form into a fine crystalline solid with the barium chloride. The treated water is then transported to the second pond where the solids are allowed to settle.

Based upon the mine water assay (Appendix 3), literature, similar systems, and expertise gained at the Snow-Probe treatment system, the initial chemical addition will be at a rate of 10 mg/l of incoming water.

### 3.4 - GENERAL

All chemical addition and storage will take place in a building adjacent to the facility. The building and pond site will be suitable fenced and posted to protect against unauthorized entry.

The piping for all systems will be placed on self-draining grades in order to eliminate difficulties due to freezing.

Sufficient flexibility will be built into the system to allow for required treatment alterations due to water assay changes, inflow fluctuations, and changes based upon experience gained during operation.

Throughout the treatment facility back-up systems will be provided. This includes visual and audio warning devices in case of equipment failure or malfunction, as well as a complete stock of replacement parts for immediate repair should it be required.

APPENDIX 2

Atlas Minerals  
Division of Atlas Corporation  
Big Indian Mines  
Moab, Utah  
84532

File ACT/037/040

Jim

Response sent  
12-29-80

Jim

15 December, 1980

James W. Smith, Jr.  
Department of Oil, Gas, and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Dear Mr. Smith:

Atlas Minerals hereby requests an amendment in acreage to the Velvet Mining and Reclamation Plan.

An additional 3 acres will be required for a mine water treatment facility. This facility will store and treat the water for radium and suspended solid reduction. The water will then be discharged into a natural drainage. An engineering report and plan has been filed with the Utah State Department of Health and a construction permit is pending.

Enclosed is a site map to show the general pond area. When the ponds are built an "as built" drawing will be forwarded to your office if you desire. This amendment will raise the total disturbed acreage to 22 acres. All reclamation activity will be in concert with the Velvet Mine Reclamation Plan.

Should you have any questions in regard to this amendment please contact me. Thank you.

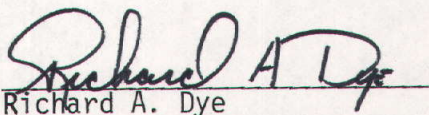
RECEIVED

DEC 18 1980

DIVISION OF  
OIL, GAS & MINING

RD/tw  
Encl.

Sincerely,

  
Richard A. Dye  
Reclamation Engineer

MT PEALE 4 SW QUADRANGLE  
UTAH-SAN JUAN CO

R 25 E

109

Preliminary Evaluation  
Pending completion of 1:62,500 scale  
15 to 20 mile map covering this area

ROYAL FLUSH

Portal

Water Discharge  
Hole

Pipe Line

Pond  
Site

VELVET

CAMEL

DEEP NECK

NO 23732

16  
(ATLAS)

RECEIVED

DEC 18 1980

DIVISION OF  
OIL, GAS & MINING

VELVET TREATMENT SYSTEM  
GENERAL LOCATION

SNYDER  
(ATLAS)

EXECUTIVE SUMMARY  
\*\*\*\*\*

ATLAS MINERALS

Velvet Mine

Section 3, T.31S., R.25E.

November 17, 1978

Location:

The Velvet Mine, a proposed random underground room and pillar uranium mine, is located on Three Step Mesa approximately 50 miles from Moab, Utah. It is located in Section 3, Township 31 South, Range 25 East, San Juan County, Utah. Consult the enclosed map.

Soils and Geology:

The proposed mine will be located in an area that has rather deep sandy soils. Soils will be stockpiled prior to constructing waste rock dumps, ore stockpiles, etc. Upon termination of operations the soil will be respread and seeded.

Hydrology:

There are no perennial streams in the area. The proposed mine site is adjacent to an ephemeral wash; however, Atlas does not plan any activities within the wash. All facilities are located on a ridge. The road will be culverted where necessary.

It is doubtful that significant ground-water will be encountered.

Ecology:

Juniper and pinyon pine in the overstory and big sagebrush, oakbrush, bluebunch wheatgrass and indian rice grass in the understory comprise the vegetation at the mine site. Cover is estimated at 15% for undisturbed areas. A recent (11-2-78) classification of wildlife habitats by the Division of Wildlife Resources designated this area as one of "limited value" for big game.

Structures and Facilities:

The only pre-existing facility is an access road constructed for exploration purposes. This road will have to be upgraded considerably.

Proposed structures include the following:

- a. One decline
- b. One developmental waste-rock pile
- c. One ore stockpile
- d. One ventsite and access road
- e. One powder magazine
- f. Shop and office facilities

Mining and Reclamation:

Atlas Minerals has committed to the following:

During Operations:

1. Surface site disturbances will disturb no more than 13 acres. Development rock will be stockpiled on a designated area which will insure the integrity of the dry wash near the mine site.

2. Mining activity will be conducted in such a manner as to minimize visual and environmental degradation to the area.
3. Mining and maintenance procedures will be conducted in a safe and orderly manner.
4. A 4 to 5 foot diameter bore hole will be drilled at a site to be approved in the future for ventilation and escape. Disturbance will be limited to 1.25 acres.
5. Prior to construction, topsoil will be removed and stockpiled for future reclamation.
6. Removal of Pinyon and Juniper trees will be minimized.
7. Disturb only that area which is essential to the mining operation, stabilize and rehabilitate the area at the earliest opportunity.

After Operations:

1. Extraneous debris, scrap, wood, and unuseable buildings will be removed from the surface.
2. Portals and vent shafts will be sealed to prevent unauthorized or accidental entry.
3. All waste rock dumps will be regraded to a rounded naturally draining configuration and surface drainage contours will be established.
4. Stockpiled topsoil will be respread to an average 12 inch depth over developmental rock and gravel.
5. The disturbed areas will be broadcast seeded and dragcovered with a grass-shrub seed mixture.
6. Seeded areas will be monitored and will be fenced.
7. Various soil amendments and/or surface manipulations will be used if found to be effective in revegetation test plots.

Impacts:

The Velvet Mine is a new operation to be constructed on undisturbed land. Atlas Minerals has a well designed mine plan that attempts to minimize the impacts as much as possible.

Surety Estimate:

Reclamation Surety was estimated at \$17,566.71 which includes 5% inflation for 15 years, the expected life of the mine. The surety includes the following work:

- a. Sealing of one portal and one vent shaft
- b. Removal of structures and equipment
- c. Removal of trash and debris
- d. Regrading of spoil piles
- e. Scarification, seeding and fencing of disturbed areas
- f. Obliteration and seeding of roads.
- g. Removal of hazardous materials
- h. 5% inflation for 15 years

A copy of the surety estimate is enclosed.

Application History:

August 23, 1978	Division received Mining and Reclamation plan, Notice of Intent, and MR-8 (Dated August 15, 1978)
August 25, 1978	Division inspection of proposed mine site.
September 1, 1978	John Hunerjager of Atlas called the Division to inquire about the approval status. He was told of several defeciciencies of the mine plan. A follow-up letter from the Division was sent the same day.
September 6, 1978	Atlas reply to September 1, 1978 letter.
September 8, 1978	John Hunerjager of Atlas called the Division and notified us that the mine plan was no longer valid. A new plan would be submitted in about a week.
September 11, 1978	John Hunerjager of Atlas called the Division and notified us that the original plan was again valid.
September 13, 1978	Follow-up letter from Atlas (dated September 11, 1978) concerning last phone conversation received.
September 18, 1978	Letter sent to Atlas stating that the Division is satisfied with the mine plan and will issue tentative approval upon concurrence of the Board. Atlas was reminded that mining cannot commence until final approval is issued.
September 26, 1978	No Executive Meeting
October 25, 1978	No Executive Meeting

October 26, 1978	Dwight Crossland and John Hunerjager meet with the Division and Board. Memorandum of Agreement signed - Board granted tentative approval, Atlas agreed to 60 day review period and agreed to accept responsibility regarding any third party objection.
October 27, 1978	Surety estimated
October 30, 1978	Letter from Mr. T.L. Wilson, Manager of Mines received, stating that Atlas agrees to the 60 day review period.
November 2, 1978	Public Notice published in San Juan Record.
November 3, 1978	Public Notice published in Salt Lake Tribune.
November 7, 1978	Surety estimate sent to Atlas Minerals.
January 2, 1979	60 day review and public comment period ends.

MINING APPLICATION  
NO. \_\_\_\_\_

Date \_\_\_\_\_



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

MINING AND RECLAMATION PLAN

(Other forms may be used in lieu of MR 2, provided they contain the same information)

1. Name of Applicant or Company Atlas Minerals, Division of Atlas Corporation
2. Proposed type of operation underground uranium mine
3. (a) Prior Land Use(s) grazing  
(b) Current Land Use(s) grazing  
(c) Possible or Prospective Future Land Use(s) \_\_\_\_\_
4. What vegetation exists on the land proposed to be affected Juniper, Pinyon, Sagebrush, Indian Ricegrass, and misc.  
(a) Types and Estimated Percent cover or density: \_\_\_\_\_  
\_\_\_\_\_
5. What is the pH range of soil before mining? 7.7 - 8.0 pH  
Name of Person or Agency and method of determining pH J.D Kester, using lamotte Colorimetric method
6. Site elevation above sea level 6500'
7. In case of coal, oil shale, and bituminous sandstone:  
Principal seam(s) and thickness(es) N/A
8. Estimated duration of mining operations 15 years
9. Has overburden, waste or rejected materials been classified as acid or alkali producing? ( ) Yes (X) No  
Does the above material being moved have any other characteristics affecting revegetation? nutrient deficient
10. Will any underground workings or aquifers be encountered? ( ) Yes (X) No  
Describe \_\_\_\_\_  
Is there an active discharge of water from abandoned deep mines on or crossing the land affected? ( ) Yes (X) No If yes, describe the quality of water being discharged. \_\_\_\_\_

11. Describe specifically a detailed procedure for: Please see Attachment A
- (a) The mining sequence for all described below
  - (b) The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.
  - (c) The procedure for site preparation including removing trees and brush.
  - (d) The method for removing and stockpiling topsoil or disturbed materials.
  - (e) The method for the placement or containment of all disturbed materials, to include the method for handling of all acid or alkali-producing and toxic materials.
  - (f) A procedure for final stabilization of disturbed materials.

#### GRADING AND REGRADING

Specifically describe:

- (a) Typical cross-section of regrading. See attachment B
- (b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material. See attachment A for remainder
- (c) What type of soil treatment will be utilized.
- (d) The method of drainage control for the final regraded area.
- (e) Maximum grading slope.

#### TESTING

1. Describe method for testing stability of reclamation fill material.

Experience with waste rock stockpiles at similar operations

Describe method for the testing of soil that is intended to support vegetation

Soil Analysis and test seeding

2. Describe any soil treatment employed as an aid to revegetation None  
planned at this time; soil amendments and/or surface manipulation may be used.
3. Describe surface preparation of areas intended to support vegetation:  
Round-off outside edges of waste rock stockpiles, scarify compacted  
surfaces, respread topsoil, and broadcast seed.

#### REVEGETATION

1. Revegetation to be completed by:

( ) Operator  
( ) Soil Conservation District  
( ) Private Contractor  
( ) Other (specify) \_\_\_\_\_

( ) Hydroseeding  
( ) Aerial Seeding  
( ) Conventional or Rangeland Drill  
☒ Broadcast and Drag  
( ) Other \_\_\_\_\_

2. Will Mulch be used? ( ) Yes (X) No

Type: \_\_\_\_\_ Rate/Acre \_\_\_\_\_ lbs.

3. Revegetation Plan and Schedule -

Species	Rate/ Acre	Planting Location	Facing N-S-E-W	Season to be replanted
Crested wheatgrass	4#/ac	All areas	SW	Fall
Fourwing saltbush	1#/ac	"	"	"
Yellow sweetclover	1 "	"	"	"
Russian wildrye	3 "	"	"	"
Indian Ricegrass	1 "	"	"	"

4. Will affected area be subject to livestock or wildlife grazing?

(X) Yes ( ) No Will vegetation protection be needed? Yes, a fence  
will be used to protect reseeded areas until such time as vegetation has  
been established.

5. Will irrigation be used: ( ) Yes (X) No Type \_\_\_\_\_

6. Describe maintenance procedures for revegetation if needed, until surety release is granted.

Monitoring and reseeding if necessary

STATE OF UTAH

COUNTY OF GRAND

I, THOMAS L WILSON, having been duly sworn  
depose and attest that all of the representations contained in the foregoing  
application are true to the best of my knowledge; that I am authorized to  
complete and file this application on behalf of the Applicant and this  
application has been executed as required by law.

Signed: Thomas L Wilson

Taken, subscribed and sworn to before me the undersigned authority  
in my said county, this 21<sup>st</sup> day of August, 1978.

Notary Public: Lee Stock

My Commission Expires: 11-2-81

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides as  
follows:

"Information relating to the location, size, or nature  
of the deposit and marked confidential by the operator,  
shall be protected as confidential information by the  
Board and the Division and not be a matter of public  
record in the absence of a written release from the  
operator, or until the mining operation has been  
terminated as provided in subsection (2) of section  
40-8-21."

Is confidential information contained herein?

YES OK (Initial)

NO \_\_\_\_\_ (Initial)

Sections desired to be maintained as confidential information -

MAPS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ATTACHMENT A  
VELVET MINE

LOCATION

The Velvet Mine is a new underground uranium mine located in Section 3 and 4, Township 31S, Range 25E, San Juan County, Utah. A declining entry will be driven from a surface site located on unpatented mining claims and with an approximate 15 per cent vegetative cover dominated by the following species:

Juniper	- <u>Juniperus osteosperma</u>
Pinyon	- <u>Pinus edulis</u>
Big Sagebrush	- <u>Artemisa tridentata</u>
Indian Ricegrass	- <u>Oryzopsis hymenoides</u>

There is an average two to four feet of sandy-clay soil with a PH of 7.6 - 8.0 at the site. There are no natural water bodies in the vicinity. Surface runoff collects in small ephemeral drainages which drain into a dry wash.

## MINE PLAN

A declining entry will be driven 3000 feet in a north, northeast direction from the surface site to the uranium ore reserves located in the Basal Triassic Chinle formation. All ore and waste rock will be transported out of the single entry.

The surface site should disturb no more than 13 acres. This will allow ample room for necessary support facilities (shop, dry, and office buildings), top-soil stockpiles, ore pads, development rock stockpiles, and all reclamation activities. Development rock will be stockpiled on a designated area which will insure the integrity of the dry wash near the mine site (see map M-3 ). Ore will be stockpiled at the mine site until trucked to the mill in Moab, Utah.

A four to five foot diameter bore hole will be drilled to provide ventilation and a secondary escapeway for underground workings. Total disturbed acreage for the venthole site and access road will be  $1\frac{1}{4}$  acres.

Access to the mine site will be via a county maintained road connecting to a company constructed access road (see map M-3 ).

The access road will have an average base width of 25 feet, be 5280 feet long and disturb a total of 3 surface acres.

Drilling in the area indicates that there will be no mine water discharge.

All mining will be conducted in a safe, orderly, and minerlike fashion.

## REHABILITATION

Prior to construction, remove and stockpile sufficient topsoil to provide an average 12" cover for the abandoned surface site. Minimize the removal of Pinyon and Juniper trees while locating mine facilities.

Upon final abandonment of the Velvet mining operation, remove from the surface site all extraneous debris, scrapmetal, discarded wood, and unusable buildings. Seal the mine portal and ventilation borehole to prevent unauthorized or accidental entry. Round-off and stabilize outside edges of the development rock stockpiles, establish surface drainage contours for prevention of water ponding and scarify compacted surfaces. Respread stockpiled topsoil to an average 12" depth over those portions of the site covered with development rock or gravel. Seed all affected land using the specified seed mixture, MR Form 2 - Page 3.

Broadcast seed, drag cover, monitor and reseed if necessary, all affected land. Employ fencing structures to protect seeded areas until vegetation is established. Use soil amendments and surface manipulation if they prove effective in revegetation test plots.

At all times, conduct mining activity in such a manner as to minimize visual and environmental degradation to the area. Disturb only that area which is essential to the mining operation, stabilize and rehabilitate the area at the earliest opportunity.

Mine: Velvet Mine

File No: \_\_\_\_\_

Submitted by:

Applicant Atlas Minerals

Division of Atlas Corporation

Representative T.L. Wilson

Manager of Mines

Address Big Indian Mines

Moab, Utah 84532

Division of Oil, Gas, and Mining  
1588 West North Temple  
SLC, UT. 84116

Re: Commitment to Rule M-10

Gentlemen:

I hereby commit the applicant to comply with Rule M-10, "Reclamation Standards" in its entirety, as adopted by the Board of Oil, Gas, and Mining on March 22n 1978.

The applicant will achieve the reclamation standards for the following categories as outlined from Rule M-10 on all areas of the land affected by this mine, unless a variance is granted in writing by the Division.

<u>Rule</u>	<u>Category of Commitment</u>
M-10(1)	Land Use
M-10(2)	Public Safety & Welfare
M-10(3)	Impoundments
M-10(4)	Slopes
M-10(5)	Highwalls
M-10(6)	Toxic Materials
M-10(7)	Roads and Pads
M-10(8)	Drainages
M-10(9)	Structures & Equipment
M-10(10)	Shafts and Portals
M-10(11)	Sediment Control
M-10(12)	Revegetation
M-10(13)	Dams
M-10(14)	Soils

I believe a variance is justified on a site-specific basis for the following subsections of Rule M-10 for reclamation on this mine and have enclosed as an attachment to this letter a narrative statement setting forth a description of the extent of the variance request and factual reasons for said variance request.

<u>Rule</u>	<u>Category of Variance Request (Narrative Attached)</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

STATE OF UTAH

COUNTY OF GRAND

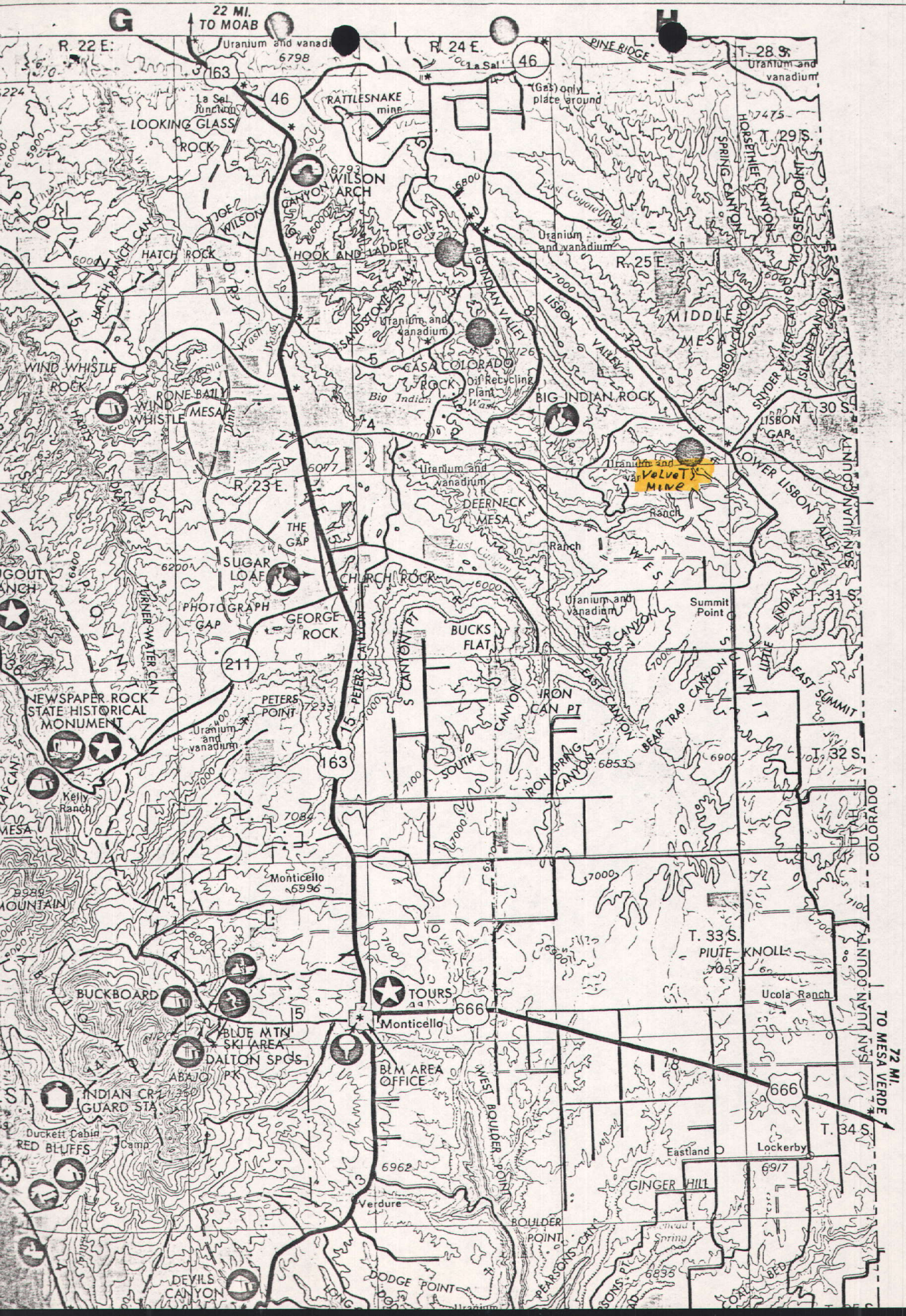
I, THOMAS L. LINDSON, having been duly sworn depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed: Thomas L. Lindson

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 21st day of August, 1978.

Notary Public: John Storch

My Commission Expires: 11-2-81



1

2

3



ACT/037/040

DIVISION OF OIL, GAS, AND MINING

BOND ESTIMATE

OPERATOR: Atlas Minerals  
 MINE NAME: Velvet Mine  
 LOCATION: Section 3, Township 31 South, Range 25 East  
 COUNTY: San Juan  
 DATE: October 27, 1978

	Operation	Amount	Rate	Cost
A.	CLEAN-UP			
	1. Removal of structures & equipment.	\$ 1,000.00	Lump sum	\$ 1,000.00
	2. Removal of trash & debris.	500.00	Lump sum	500.00
	3. Leveling of ancillary facilities pads and access roads.	-----	-----	-----
B.	REGRADING & RECONTOURING			
	1. Earthwork including haulage and grading of spoils, waste and overburden.	16 hrs. cat time	\$ 85.00/hr.	1,360.00
	2. Recontouring of highwalls and excavations.	-----	-----	-----
	3. Spreading of soil or surficial materials.	4800 yds at 800 yds/hr.	85.00/hr.	510.00
C.	STABILIZATION			
	1. Soil preparation, scarification, fertilization, etc.	18 acres	25.00/ac	450.00
	2. Seeding or planting.	18 acres	150.00/ac	2,700.00
	3. Construction of terraces, waterbars, etc. Close road	2 hrs. cat time	85.00/hr.	170.00
D.	LABOR			
	1. Supervision.	16 hours	10.00/hr.	160.00
	2. Labor exclusive of bulldozer time.			
E.	SAFETY			
	1. Erection of fences, portal coverings, etc.	1 portal, 1 vent hole, fence	500.00/ea.	1,500.00
	2. Removal or neutralization of explosive or hazardous materials.	Lump sum	100.00	100.00
F.	MONITORING			
	1. Continuing or periodic monitoring, sampling & testing deemed necessary.		Subtotal	\$ 8,450.00
G.	OTHER			
	1. 5% inflation for 15 years	CAF = 2,0789		\$ 9,116.71
			Total	\$17,566.71

COMMODITY: URANIUM

FILE NOTATIONS

Aug. 23, 78

OPERATOR: Atlas Minerals  
ADDRESS: Big Indian Mines  
Moab, Utah 84532  
REP: L. L. Wilson  
Manager of Mines  
TELEPHONE: 686-2217

FILE NO: ACT/037/040  
MINE NAME: Velvet Mine  
LEGAL DES: SEC(S) 3  
T. 31 S R. 25 E  
COUNTY: San Juan  
LAND OWNERSHIP \_\_\_\_\_  
MINERAL OWNERSHIP \_\_\_\_\_

FILE PREPARED X  
INDEX CARD X  
ROLODEX CARDS Y  
PIN MAP X

Entered On:  
N.I.C.M. 8-30-78  
M&R PLAN 8-23-78  
MINING MAILING LIST \_\_\_\_\_

TEXT. APPR: Oct. 26, '78  
FINAL APPR: \_\_\_\_\_  
BOND ESTIMATE: \_\_\_\_\_  
BOND RECEIVED: \_\_\_\_\_

PUBLISHED:

- (1) La Tribune
- (2) Deseret News
- (3) San Juan Record
- (4) \_\_\_\_\_

AFFIDAVIT OF PUBLISHING RECEIVED:

Nov. 7, '78

Nov. 2, '78

NOTICES SENT TO:

LAND OWNERS: B.M.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

MINING MAILING LIST ✓  
ZONING AUTHORITY ✓  
COUNTY COMMISSIONERS ✓

APPLICANT(S) As per above -

HEARING HELD: NO \_\_\_\_\_ YES \_\_\_\_\_ DATE: \_\_\_\_\_ REMARKS \_\_\_\_\_

TYPE OF BOND: \_\_\_\_\_

Date/Amount approved: \_\_\_\_\_ Date/Forum approved: \_\_\_\_\_

ANNUAL REPORT RECEIVED:

1976 \_\_\_\_\_ 1977 \_\_\_\_\_ 1978 \_\_\_\_\_ 1979 \_\_\_\_\_ 1980 \_\_\_\_\_ 1981 \_\_\_\_\_ 1982 \_\_\_\_\_ 1983 \_\_\_\_\_ 1984 \_\_\_\_\_

REMARKS:

CONFIDENTIAL: Maps

# FILE NOTATIONS

DITY: Uranium

DATE:

OPERATOR: Atlas Minerals

FILE NUMBER: ACT/037/040

ADDRESS: Big Indian Mines

MINE NAME: Velvet Mine

LASAI, Moab, Utah 84532 84530

LEGAL DESCRIPTION: Sec. (s) 3

REPRESENTATIVE: T. L. Wilson,  
Manager of Mines

T. 31 South R. 25 East

TELEPHONE: 686-2217

COUNTY: San Juan

LAND OWNERSHIP:

MINERAL OWNERSHIP:

FILE PREPARED

Entered On:

TENTATIVE APPROVAL: 10/26/78

INDEX CARD X

N.I.C.M. 8/30/78

FINAL APPROVAL: ~~3-5-79~~ 11-29-79

ROLODEX CARDS X

M&R PLAN 8/23/78

BOND ESTIMATE: \$17,566.71

PIN MAP X

MAILING LIST

BOND RECEIVED: 10-11-79

PUBLISHED:

AFFIDAVIT OF PUBLISHING RECEIVED:

(1) Salt Lake Tribune

11/7/78

(2) Deseret News

(3) San Juan Record

11/2/78

(4)

NOTICES SENT TO:

LAND OWNERS: BLM

MINING MAILING LIST X

ZONING AUTHORITY X

COUNTY COMMISSIONERS X

APPLICANT(S) as per above

HEARING HELD: NO YES DATE: REMARKS

TYPE OF BOND:

Date/Amount approved: Date/Form approved:

ANNUAL REPORT RECEIVED:

1976 1977 1978 1979 1980 1981 1982 1983 1984

REMARKS:

CONFIDENTIAL: Maps

R25E

659

660

10'

661

662

663

2680000 FEET

664

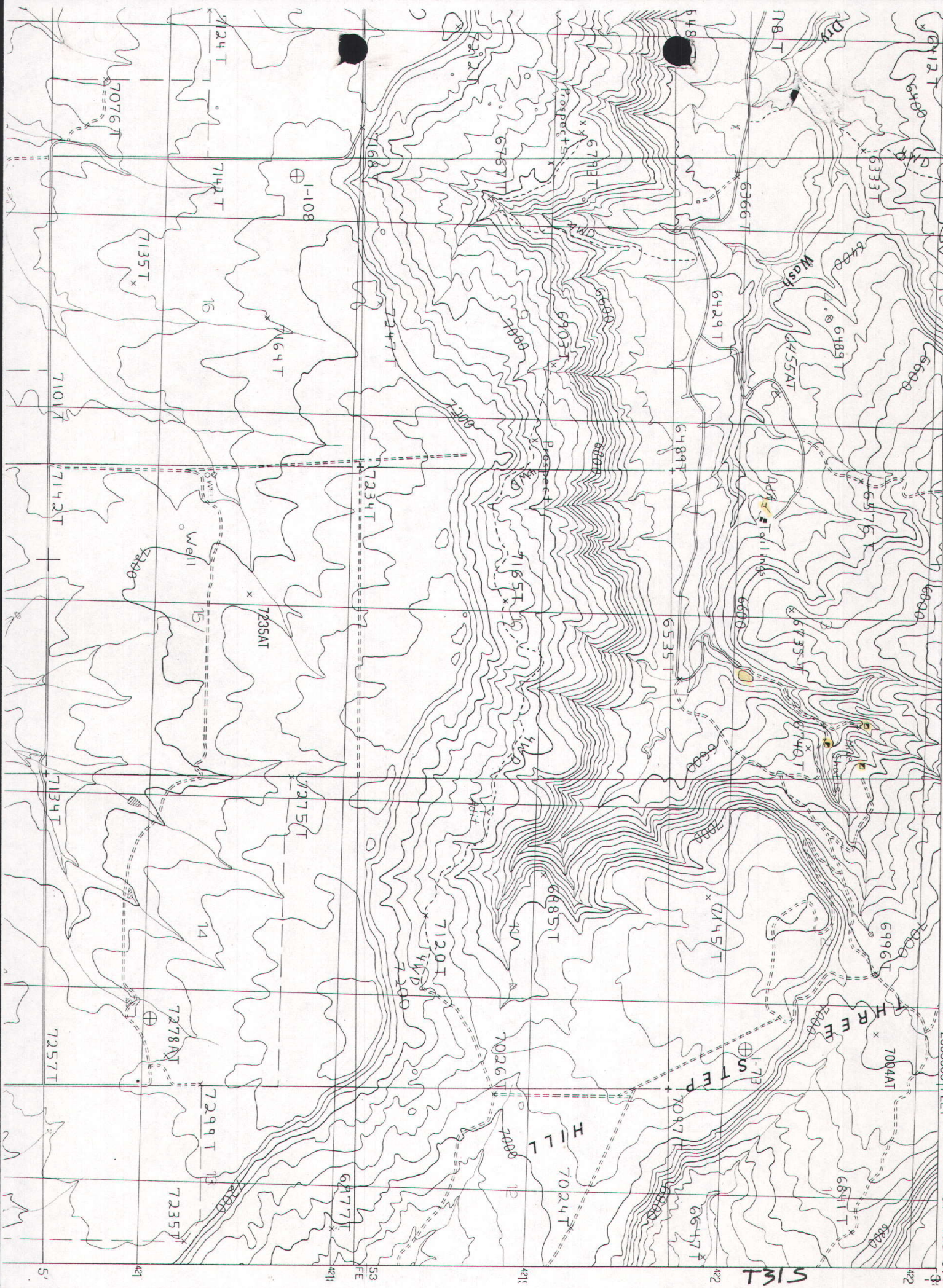
109° 07'

M/037/040

SILVER HILL

SOFT CANYON QUAD

7.5 MINUTE SERIES (TOPOGRAPHIC)



Preliminary edition  
Pending completion of 1.62, 500  
15 minute maps covering this area

RECEIVED

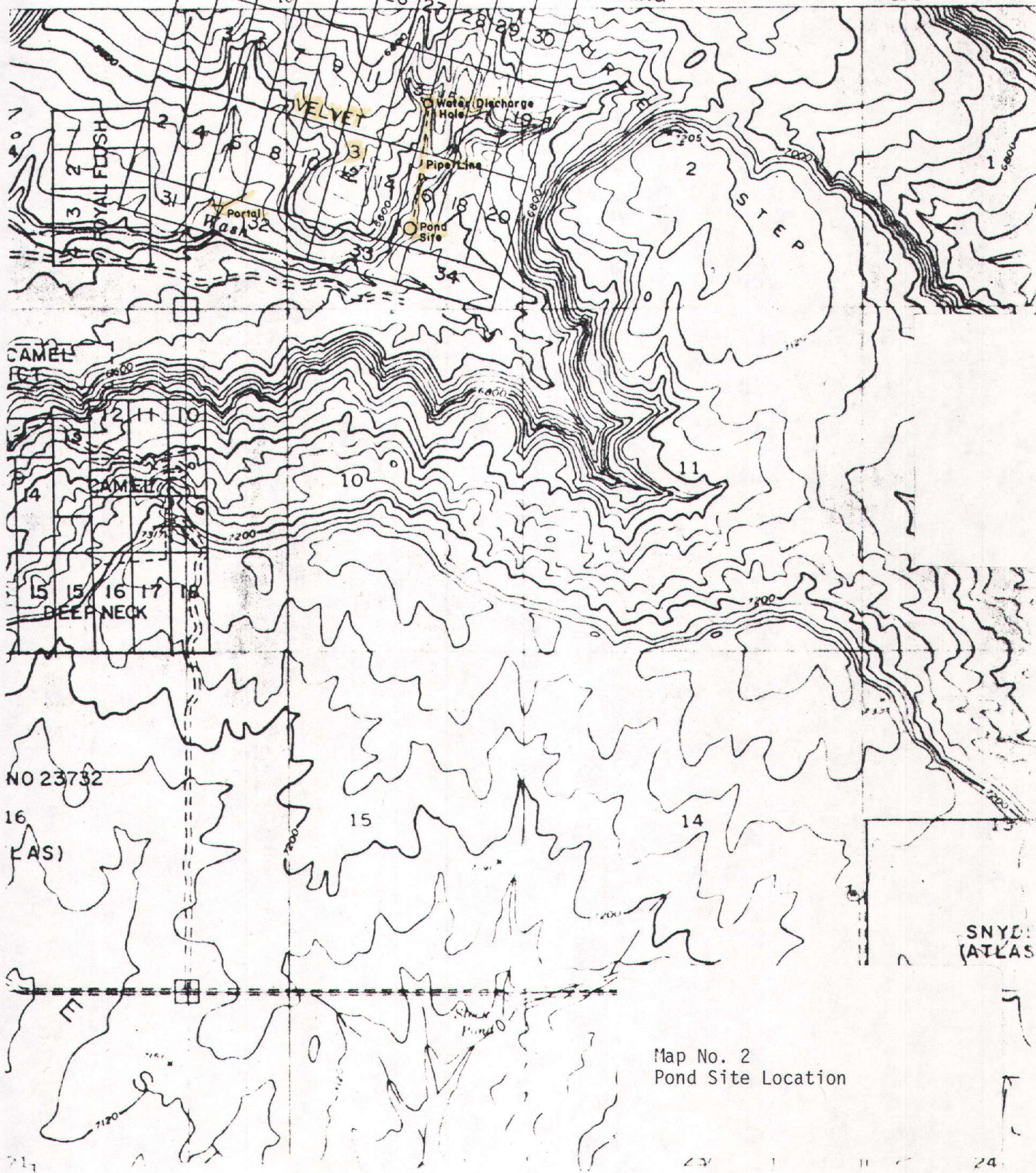
JAN 19 1931

M/037/040

MT. PEALE 4 SW QUADRANGLE  
UTAH--SAN JUAN CO.

R 25 E

10°

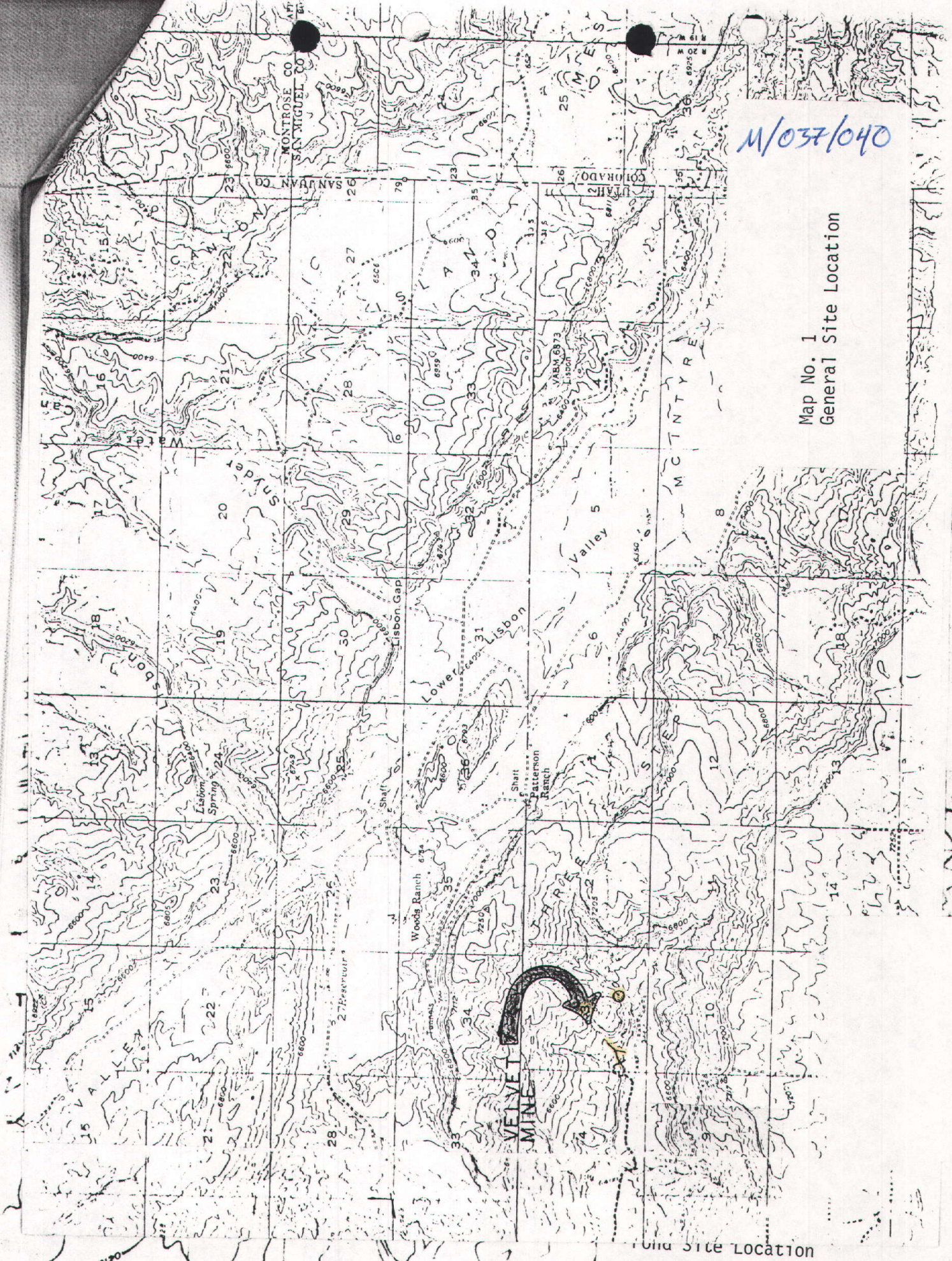


Map No. 2  
Pond Site Location

M/037/040

Map No. 1  
General Site Location

VELVET  
MINE



Division of Oil, Gas, & Mining  
Mining Report

01/30/92

MINE ID: M037040

MINE NAME: VELVET

OPERATOR: UMETCO MINERALS CORPORATION  
CONTACT: R A VAN HORN  
ADDRESS: 2754 COMPASS DR STE 280  
GRAND JUNCTION CO 81506  
  
PHONE: (303)245-3700

Surface Owner: BLM  
Mineral Owner: BLM

BLM #:  
Lease #:

Qtr-Qtr-Qtr1 Qtr-Qtr1 Qtr1 Qtr-Qtr-Qtr2 Qtr-Qtr2 Qtr2 Sec Range Town  
3 25.0E 31.0S

Permit Status: APP

Mine Type [(S)urface, (U)nderground]: S

Mine Status (PRO,ACT,SUS,RET): SUS

Acreage: 27

Minerals Mined  
U

DATE  
RECEIVED

TENTATIVE APPROVAL  
DATE

FINAL APPROVAL  
DATE

LAST INSPECTED

08/15/78

10/26/78

11/29/78

03/05/90

BOND TYPE: SURETY BOND

BOND AMOUNT: 62,535

ANNUAL REPORT YEAR: 91

NONCOMPLIANCE NOTICES: 0	DATE ISSUED: / /	DATE RESOLVED: / /
VIOLATIONS: 0	DATE ISSUED: / /	DATE RESOLVED: / /
REVISIONS: 0	DATE REC'D: / /	DATE APPROVED: / /
AMENDMENTS: 0	DATE REC'D: / /	DATE APPROVED: / /

COMMENTS:

ATLAS BEGAN DEVELOPING THIS NEW MINE IN LATE 1978. THE MINE HAS BEEN ON STAND-BY SINCE EARLY 1984. ATLAS CONTINUES TO RUN PUMPS AND TREAT THE WATER. LAST INSPECTION REPORTED EROSION PROBLEMS ON THE FLANK OF THE WASTE PILE. THE OPERATION WAS TRANSFERRED TO UMETCO IN JAN. OF 89.

M/037/040  
VELVET



